

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/656,815	09/07/2000	Alan F. Rodriguez JR.	B-68149(014354/0004	1848
33649	7590 05/05/2005		EXAM	INER
Mr. Christopher John Rourk			COLBERT, ELLA	
GODWIN GRUBER, LLP 1201 Elm Street, Renaissance Tower			ART UNIT	PAPER NUMBER
DALLAS, T	•		3624	
			DATE MAIL ED: 05/05/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/656,815	RODRIGUEZ ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ella Colbert	3624			
The MAILING DATE of this communication a	appears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply secified above, the maximum statutory period in the period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the may be arrived patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a repreply within the statutory minimum of thirty (od will apply and will expire SIX (6) MONTF tute, cause the application to become ABAI	ly be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 01	February 2005.				
,	·				
, <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims	•				
4) Claim(s) 9-28 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 9-28 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corn 11) The oath or declaration is objected to by the	ccepted or b) objected to by the drawing(s) be held in abeyance ection is required if the drawing(s)	e. See 37 CFR 1.85(a). ) is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Sur	mmary (PTO-413)			
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	Paper No(s)/	Mail Date  brmal Patent Application (PTO-152)  .			

Art Unit: 3624

#### **DETAILED ACTION**

1. Claims 9-28 are pending. Claim 11 has been amended in this communication filed 02/02/05 entered as Response After Non-Final Action.

#### Specification

2. The abstract of the disclosure is objected to because in the description of Figures 2 and 3 do not mention element "112" which is in the figure drawings, figure 7, elements "720", "722", and "724" are not found as being mentioned or described, and figure 8, elements "814" and "816" were not mentioned in the description of figure 8. Correction is required. See MPEP § 608.01(b).

#### **Drawings**

3. The drawings are objected to because each of the drawing figures 1-8 have "014354.0004" under the drawing figure number which needs to be deleted. Applicants' are respectfully requested to see the proper format for drawings by reviewing the references cited in this Office action. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary

Application/Control Number: 09/656,815 Page 3

Art Unit: 3624

to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Objections

4. Claim 10 is objected to because of the following informalities: claim 10, line 2 reads "comprising device router ....". This line would be better recited as "comprising a device router...". Appropriate correction is required.

### Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 9, 10,13, 14, 17, 19, 22, 24, and 26-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 appears to have step(s) omitted. The claim is very unclear and vague. What is forming a credit transaction data message? Is it the protocol translator or the transmission protocol forming a credit transaction message? Claim 13 appears to have a step omitted after the "decrypting of the encrypted authorization request" and before the "determining which of the two or more authorization systems ...". Claim 17 has a similar problem relating to step(s) being omitted from the claim.

Art Unit: 3624

Claims 13 and 22 lack antecedent basis. Claim 13 recites the limitation "two or more authorization systems" in line 10 and it is not in any of the other limitations of this claim. Claim 22, line 3 recites "two or more point-of-sale systems" and in line 7 "one or more point of sale systems". There is insufficient antecedent basis for this limitation in the claim.

Claims 9, 13, 17, and 22 discuss two or more point of sale systems or two or more point of sale devices and claims 10, 14, 19, 22, 24, and 26-28 discuss one or more point of sale systems or point of sale device. The Specification on page 13, lines 10 and 11 references two or more point of sale systems. It is unclear whether there are two or more point of sale systems or one point of sale system or a point of sale device because the claims and the Specification do not appear to be in agreement.

#### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 9-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,500,890) Rogge et al in view of (US 5,448,047) Nair et al, hereafter Nair.
- Claim 9. Rogge teaches, An apparatus for transmitting credit transaction data over a communications medium comprising: a protocol translator receiving the credit transaction data from two or more point of sale systems according to two or more

Application/Control Number: 09/656,815 Page 5

Art Unit: 3624

different transmission protocols each transmission protocol associated with a different credit authorization system, and forming a credit transaction data message (col. 3, line 51-col. 4, line 36, col. 5, lines 28-50 and line 59-col. 6, line 55). Rogge failed to teach, an encryption system coupled to the protocol translator, the encryption system receiving the credit transaction data message from the protocol translator and encrypting the credit transaction data message. Nair teaches, an encryption system coupled to the protocol translator, the encryption system receiving the credit transaction data message from the protocol translator and encrypting the credit transaction data message (col. 5, line 60 - col. 6, line 38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an encryption system coupled to the protocol translator, the encryption system receiving the credit transaction data message from the protocol translator and encrypting the credit transaction data message and to modify in Rogge because such a modification would allow Rogge to have a multireader terminal with a security indicator and if the security indicator is set the terminal can read the card day from both the first and second card identifying information readers.

Claim 10. Rogge teaches, The apparatus of claim 9 further comprising a device roister coupled to the protocol translator, the device roister transmitting authorization data received in response to the credit transaction data message to the one or more point of sale systems (col. 8, line 15 –col. 9, line 11).

Claim 11. Rogge teaches, The apparatus of claim 9 further comprising a management system interface coupled to the protocol translator, the management system interface storing a protocol module to the protocol translator (col. 11, lines 55-

Application/Control Number: 09/656,815 Page 6

Art Unit: 3624

col. 12, line 51, col. 14, line 42-58, col. 15, line 64-col. 16, line 25, and col. 17, lines 21-65).

9. Claims 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,500,890) Rogge et al, hereafter Rogge and (US 5,448,047) Nair et al, hereafter Nair in view of (US 6,178,409) Weber et al, hereafter Weber.

Claim 12. Rogge and Nair failed to teach, The apparatus of claim 9 further comprising a management system interface coupled to the encryption system, the management system interface storing an encryption module to the encryption system. Weber teaches, a management system interface coupled to the encryption system, the management system interface storing an encryption module to the encryption system (col. 3, lines 10-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a management system interface coupled to the encryption system, the management system interface storing an encryption module to the encryption system and to modify in Rogge because such a modification would allow Rogge to have a secure communication protocol with a payment gateway computer that provides electronic commerce services to support a financial institution such as a bank that interfaces to the financial institution to support the authorization and capture of transactions.

Claim 13. Rogge teaches, A method for transmitting credit transaction data over a communications medium comprising; receiving credit transaction data from two or more point of sale devices, each reading credit card data from a magnetic stripe of a

Art Unit: 3624

credit card (col. 5, lines 27-50, col. 6, line 66 –col. 7, line 11, and col. 11, lines 55-64); determining a point-of-sale device data transmission protocol to use to assemble the credit transaction data into an authorization request (col. 8, lines 15-47); determining which of two or more authorization systems is the appropriate authorization system to provide the authorization request to (col. 9, lines 12-40); and transmitting the authorization request to the appropriate authorization system (col. 10, lines 15-40).

Rogge and Nair failed to teach, encrypting the authorization request; transmitting the encrypted authorization request over the communications medium; decrypting the encrypted authorization request. Weber teaches, encrypting the authorization request (col. 15, line 63- col. 16, line 35); transmitting the encrypted authorization request over the communications medium (col. 16, lines 60-67); and decrypting the encrypted authorization request (col. Col. 16, lines 41-52). It would have been obvious to one having ordinary skill in the art at the time the invention was made to encrypt the authorization request; transmit the encrypted authorization request over the communications medium; and decrypt the encrypted authorization request and to modify in Rogge because such a modification would allow Rogge to include authorization and encryption public key that appends to the combination of the combined basic authorization request and the public key.

Claim 14. Rogge and Nair failed to teach, The method of claim 13 wherein receiving the credit transaction data from the point of sale device comprises receiving the credit transaction data in accordance with one or more of an ISO 8583 protocol or a Visa-K protocol. Weber teaches, receiving the credit transaction data from the point of

Art Unit: 3624

sale device comprises receiving the credit transaction data in accordance with one or more of an ISO 8583 protocol or a Visa-K protocol (col. 7, lines 1-31). It would have been obvious to one having ordinary skill in the art at the time the invention was made to receive receiving the credit transaction data from the point of sale device comprises receiving the credit transaction data in accordance with one or more of an ISO 8583 protocol or a Visa-K protocol and to modify in Rogge because such a modification would allow Rogge to have a payment protocol request packet (e.g., an SSL-encapsulated ISO 8583 packet) before sending the request to a gateway.

Claim 15. Rogge and Nair failed to teach, The method of claim 13 wherein encrypting the authorization request comprises encrypting the credit transaction data using an encryption module received from a hub manager. Weber teaches, wherein encrypting the authorization request comprises encrypting the credit transaction data using an encryption module received from a hub manager (col. 13, lines 29-56 and col. 14, lines 37-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to encrypt the authorization request to comprise encrypting the credit transaction data using an encryption module received from a hub manager and to modify in Rogge because such a modification would allow Rogge to have an Authorization/Data Capture Module to process the requests originated by the merchant to the consumer and to route them to a Protocol Module.

Claim 16. Rogge and Nair failed to teach, The method of claim 13 wherein transmitting the encrypted authorization request over the communications medium comprises transmitting the encrypted data in an HTTP format. Weber teaches,

Art Unit: 3624

transmitting the encrypted authorization request over the communications medium comprises transmitting the encrypted data in an HTTP format (col. 64, lines 30-57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit the encrypted authorization request over the communications medium to comprise transmitting the encrypted data in an HTTP format and to modify in Rogge because such a modification would allow Rogge to utilize well- known Hypertext Markup Language (HTML) to implement documents on the Internet together with a general-purpose secure communication protocol (HTTP- HyperText Transfer Protocol) for a transport medium between the client and the merchant.

Claim 17. Rogge failed to teach, A method for controlling the transmission of credit transaction data comprising: transmitting one or more control messages to a remote hub and processing the control message at the remote hub. Rogge teaches, each control message adapted for one of two or more different point of sale devices process the control message at the remote hub (col. 42, lines 41-50); and performing a control function on one of two or more point of sale devices that read credit card data from a magnetic stripe of a credit card at the remote hub in response to the control message if the control message is adapted for the point of sale device (col. 96, line 51-col. 99, line 43). Nair teaches, A method for controlling the transmission of credit transaction data comprising: transmitting one or more control messages to a remote hub (col. 4, lines 20-44 and lines 54-60); and processing the control message at the remote hub (col. 4, line 61-col. 5, line 16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit one or more

Art Unit: 3624

control messages to a remote hub and processing the control message at the remote hub and to modify in Rogge because such a modification would allow Rogge to have a means to transmit control messages and to process the messages through a gateway (hub).

Claim18. Rogge and Nair failed to teach, The method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises transmitting status data far the remote hub. Weber teaches, performing the control function at the remote hub in response to the control message comprises transmitting status data far the remote hub (col. 62, lines 9-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the control function at the remote hub in response to the control message comprises transmitting status data far the remote hub and to modify in Rogge because such a modification would allow Rogge to have the stages of processing a payment capture request and generate and transmit a payment capture request response.

Claim 19. Rogge and Nair failed to teach, The method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises transmitting status data for one or more point of sale devices connected to the remote hub. Weber teaches, performing the control function at the remote hub in response to the control message comprises transmitting status data for one or more point of sale devices connected to the remote hub (col. 17, lines 1-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the control function at the remote hub in response to the control message

Art Unit: 3624

comprises transmitting status data for one or more point of sale devices connected to the remote hub and to modify in Rogge because such a modification would allow Rogge to have a gateway computer systems that verifies the merchants computer system's validation.

Claim 20. Rogge failed to teach, performing the control function at the remote hub in response to the control message comprises updating the remote hub with a protocol module to accommodate a new point of sale device. Nair teaches, The method of claim 17 wherein performing the control function at the remote hub in response to the control message comprises updating the remote hub with a protocol module to accommodate a new point of sale device (col. 11, line 48-col. 12, line 6 and fig. 2C). It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform the control function at the remote hub in response to the control message comprises updating the remote hub with a protocol module to accommodate a new point of sale device and to modify in Rogge because such a modification would allow Rogge to have a multireader terminal connected to a POS terminal via a cable and serial ports for control of the message to the new point of sale terminal.

Claim 21. Rogge and Nair failed to teach, The method of claim t 7 wherein performing the control function at the remote hub in response to the control message comprises updating the remote hub with an encryption module. Weber teaches, performing the control function at the remote hub in response to the control message comprises updating the remote hub with an encryption module (col. 19, lines 21-67). It would have been obvious to one having ordinary skill in the art at the time the invention

Art Unit: 3624

was made to perform the control function at the remote hub in response to the control message comprises updating the remote hub with an encryption module and to modify in Rogge because such a modification would allow Rogge to have a customer-merchant general-purpose secure communication protocol that depicts a basic authorization request.

Claim 22. Rogge teaches, A system for transmitting credit transaction data comprising: two or more point-of-sale systems, each point-of-sale system using a proprietary data format to read credit card data from a magnetic stripe of a credit card and generate credit transaction data (col. 6, line 66-col. 7, line 11 and col. 8, lines 15-33). Rogge failed to teach, a remote hub system coupled to a communications medium, the remote hub system receiving the credit transaction data from one or more point of sale systems, translating the credit transaction data from the proprietary data format to a predetermined data format, encrypting the translated credit transaction data, and transmitting the translated encrypted credit transaction data over the communications medium; and a gateway system coupled to the communications medium, the gateway system receiving the encrypted translated credit transaction data, decrypting the encrypted translated credit transaction data, and transmitting the translated credit transaction data to an authorization system. Weber teaches, a remote hub system coupled to a communications medium, the remote hub system receiving the credit transaction data from one or more point of sale systems, translating the credit transaction data from the proprietary data format to a predetermined data format, encrypting the translated credit transaction data, and transmitting the translated

Art Unit: 3624

encrypted credit transaction data over the communications medium (col. 24, lines 7-56); and a gateway system coupled to the communications medium, the gateway system receiving the encrypted translated credit transaction data, decrypting the encrypted translated credit transaction data, and transmitting the translated credit transaction data to an authorization system (col. 38, line 37-col. 40, line 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a remote hub system coupled to a communications medium, the remote hub system receiving the credit transaction data from one or more point of sale systems, translating the credit transaction data from the proprietary data format to a predetermined data format, encrypting the translated credit transaction data, and transmitting the translated encrypted credit transaction data over the communications medium; and a gateway system coupled to the communications medium, the gateway system receiving the encrypted translated credit transaction data, decrypting the encrypted translated credit transaction data, and transmitting the translated credit transaction data to an authorization system and to modify in Rogge because such a modification would allow Rogge to have a secure general-purpose communication protocol such as the SSL protocol.

Claim 23. Rogge and Nair failed to teach, The system of claim 22 further comprising: a first authorization system coupled to the gateway system; a second authorization system coupled to the gateway system; and wherein the gateway system transmits the credit transaction data to the first or second authorization system based upon the translated credit transaction data. Weber teaches, a first authorization system

Art Unit: 3624

coupled to the gateway system; a second authorization system coupled to the gateway system; and wherein the gateway system transmits the credit transaction data to the first or second authorization system based upon the translated credit transaction data (col.61, line 26- col. 63, line 62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a first authorization system coupled to the gateway system; a second authorization system coupled to the gateway system; and wherein the gateway system transmits the credit transaction data to the first or second authorization system based upon the translated credit transaction data and to modify in Rogge because such a modification would allow Rogge to secure payment authorization system for processing a payment authorization request and generating and transmitting a payment authorization response.

Claim 24. Rogge and Nair failed to teach, The system of claim 22 wherein the remote hub system further comprises a protocol translator receiving the credit transaction data from each of the one or more point of sale systems according to the proprietary data format associated with each point of sale system. Weber teaches, the remote hub system further comprises a protocol translator receiving the credit transaction data from each of the one or more point of sale systems according to the proprietary data format associated with each point of sale system (col. 65, line 16 –col. 66, line 20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the remote hub system further comprises a protocol translator receiving the credit transaction data from each of the one or more point of sale systems according to the proprietary data format associated with each

an Internet environment.

Art Unit: 3624

point of sale system and to modify in Rogge because such a modification would allow Rogge to have a protocol that can translate from HTML page format to XML format in

Claim 25. Rogge and Nair failed to teach, The system of claim 22 wherein the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on the remote hub system. Weber teaches, wherein the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on the remote hub system (col. 16, line 13-col. 17, line 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the remote hub system further comprise an update system receiving an encryption update and installing the encryption update on the remote hub system and to modify in Rogge because such a modification would allow Rogge to have a private key to encrypt a payment authorization response and a merchant authorization response thereby encrypting and obtaining a cleartext version of the random key.

Claim 26, Rogge and Nair failed to teach, The system of claim 22 wherein the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on one or more of the point-of-sale systems. Weber teaches, wherein the remote hub system further comprises an update system receiving an encryption update and installing the encryption update on one or more of the point-of-sale systems (col. 21, lines 20-col. 22, line 23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a

Art Unit: 3624

remote hub system further comprises an update system receiving an encryption update and installing the encryption update on one or more of the point-of-sale systems and to modify in Rogge because such a modification would allow Rogge to have a payment gateway computer system that encrypts using a random key encryption key forming and encrypted combined block.

Claim 27. Rogge teaches, The system of claim 22 wherein the point-of-sale systems include one or more pre-existing point of sale systems that are configured to communicate using a public switched telephone network telephone line. Kramer teaches, wherein the point-of-sale systems include one or more pre-existing point of sale systems that are configured to communicate using a public switched telephone network telephone line (col. 1, lines 9-13 and fig.'s1 and 2(11-16).

Claim 28. Rogge teaches, The system of claim 27 further comprising a telephone backup system coupled to one or more of the point of sale systems and the hub, wherein the hub uses the telephone backup system when the communications medium is unavailable (col. 12, lines 54-64).

#### Response to Arguments

6. Applicant's arguments filed 02/01/05 are moot in view of the new ground(s) of rejection.

## Response to Arguments

10. Applicant's arguments with respect to claims 9-28 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Art Unit: 3624

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Clark et al (US 5,490,251) disclosed transmitting transaction data using a telecommunications network.

#### **Inquiries**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday-Thursday, 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E. Colbert May 2, 2005